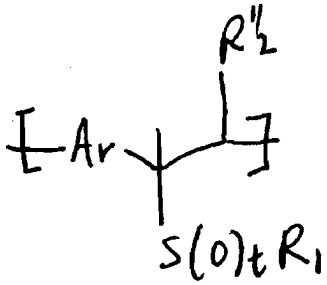
Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A method of preparing a polymer which comprises structural units of formula I,



(I)

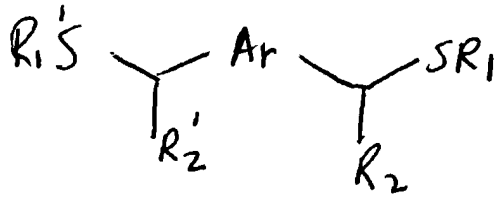
in which formula:

Ar is an aromatic cyclic system with 4 to 20 carbon atoms, which may be substituted with a substituent chosen from the group consisting of a non-branched C_1-C_{20}-alkyl, a C_3-C_{20}-alkoxy, a C_1-C_{20}-alkylsulfate, a branched C_3-C_{20}-alkyl, a phenyl group and a benzyl group and which may comprise up to 4 heteroatoms chosen from the group consisting of oxygen, sulfur and nitrogen in the aromatic cyclic system,

t is equal to 0, 1 or 2,

R_1 is chosen from the group consisting of a non-branched C_1-C_{20}-alkyl group, a branched C_3-C_{20} alkyl group, a cyclic C_4-C_{20}-alkyl group, a C_1-C_4-alkyl-substituted cyclic C_4-C_{20}-alkyl group, a phenyl group and a benzyl group, which groups may comprise heteroatoms,

R_2 and R''_2 are each chosen for the group consisting of a hydrogen atom, a C_1-C_{20}-alkyl group, and a C_4-C_{20}-aryl group, which groups may comprise substituents, characterized in that the method starts with a compound having the formula II



(II)

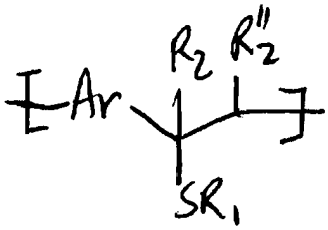
in which formula

R'_1 is chosen from the group consisting of a non-branched C_1-C_{20}-alkyl group, a branched C_3-C_{20}-alkyl group, a cyclic alkyl group, a C_1-C_4-alkyl-substituted cyclic alkyl group, a phenyl group, and a benzyl group, which groups may comprise heteroatoms,

R_1, R_2 and Ar are equal to R_1, R_2 and Ar in formula I, and

R'_2 is chosen from the group consisting of a hydrogen atom, a C_1-C_{20}-alkyl group, an a C_4-C_{20}-aryl group, which groups may comprise substituents,

and that the polymer with structural units of the formula I is prepared through polymerization with the aid of a base into a polymer which comprises units having the formula III



(III)

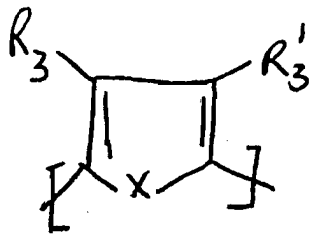
in which formula

R_1, R_2 and Ar are equal to R_1, R_2 and Ar in formula II, and

R''_2 is chosen from the group comprising R_2 and R'_2,

and for the preparation of the polymer with units having the formula I, in which formula t is equal to 1 or 2, through oxidation of at least a number of the units of the polymer having the formula III.

2. (Previously Presented) A method as claimed in claim 1, characterized in that the method starts with a compound having the formula II in which –Ar- is the unit having the formula IV



(IV)

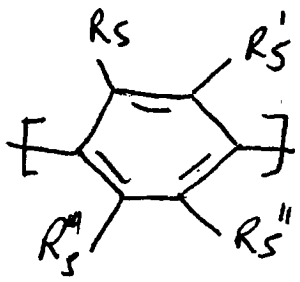
in which formula

X is chosen from the group consisting of O, S, NR_6,

R_2 and R'_3 are chosen from the group consisting of a hydrogen atom, a chlorine atom, a bromine atom, a fluorine atom, and an iodine atom, a C_1-C_4-alkyl group, a carbonitryl group, a trihalomethyl group, a hydroxy group, a nitro group, an amino group, a carboxyl group, a sulfoxyl group, a sulfonate group, a carbonate group, a substituted and non-substituted phenyl group, an alkylaryl group, an alkalkyl group, an alkoxy group, and a thioalkoxy group, and

R_6 is chosen from the group consisting of a hydrogen atom, a C_1-C_{20}-alkyl group, an aryl group, a C_1-C_{20}-alkylaryl group and an arylalkyl group.

3. (Previously Presented) A method as claimed in claim 1, characterized in that the method starts with a compound having the formula II in which –Ar- is the unit having the formula V



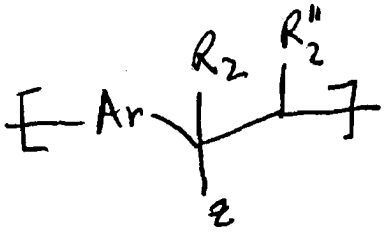
(V)

in which formula

R_5, R'_5,R''_5 and R'''_5 are chosen from the group consisting of a hydrogen atom, a chlorine atom, a bromine atom, a fluorine atom, an iodine atom, a C_1-C_{22}-alkyl group, a carbonitryl group, a trihalomethyl group, a hydroxy group, a nitro group, an amino group, a carboxyl group, a sulfoxyl group, a sulfonate group, a carbonitrate group, an optionally substituted phenyl group, a C_1-C_{22}-alkylaryl group, a C_1-C_{22}-arylalkyl group, a C_1-C_{22}-alkoxy group, and a C_1-C_{22}-thioalkoxy group.

4-7 (Canceled).

8. (Previously Presented) A composition of polymers with structural units having the formula IX:



(IX)

Ar is an aromatic cyclic system with 4 to 20 carbon atoms, which may be substituted with a substituent chosen from the group consisting of a non-branched C_1-C_{20}-alkyl, group, a C_3-C_{20}-alkoxy group, a C_1-C_{20}-alkylsulfate group, a branched C_3-C_{20}-alkyl group, a phenyl group and a benzyl group and which may comprise up to 4 heteroatoms chosen from the group consisting of oxygen, sulfur and nitrogen in the aromatic cyclic system,

R_2 and R_2' are chosen from the group consisting of a hydrogen atom and C_1-C_{20}-alkyl and a C_4-C_{20}-aryl group, which groups may comprise substituents, and

Z is chosen from a group consisting of $S(O)pR_1$, OR_2, in which p is equal to 0, 1 or 2, and R_1 and R_2 are chosen from the group comprising a non-branched C_1-C_{20}-alkyl group, a branched C_3-C_{20} alkyl group, a cyclic C_4-C_{20} alkyl group, a C_1-C_4-alkyl-substituted cyclic C_4-C_{20}-alkyl group, a phenyl group,and a benzyl group, which groups may contain heteroatoms,

wherein a first fraction of the composition comprises polymers with structural units having the formula IX with Z equal to $S(O)pR_1$ and a chain length of 50 to 1000 units, and a second fraction of the composition comprises polymers with a chain length of more than 1000 units.

9-14 (Canceled).